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10/599,073

09/19/2006

Alexander Haepf

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20311 7590 10/16/2008
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EXAMINER

CHARLES, MARCUS

ART UNIT

PAPER NUMBER

3656

MAIL DATE

DELIVERY MODE

10/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/599,073 | Applicant(s) HAEPP, ALEXANDER | |
| | Examiner Marcus Charles | Art Unit 3656 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9-19-2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is the first action relating to serial application number 10/599,073 filed 09-19-2006.

Claims 1-15 are currently pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The examiner has accepted the drawing filed with this application as formal drawing.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, "the phrase "sprung manner" is unclear as it is not clear what resilient is being referred to as a sprung manner.

In claim 4, the phrase "between flanks" is unclear because it is not clear if the flanks are the same as that of claim 1. If they are the same then there includes a double inclusion.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 and 5-9, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambert (6,447,169) in view of Hoffmann et al. (4,398,775).

Chambert discloses a cage for a tapered ball bearing comprising a cage having a ball socket (9) which are adjacent to one another on the circumferential side about the rotational axis, the balls are delimited on a circumferential side by webs (11), the cage has retaining lugs (see 13) protruding from one of the side wall circumferential flank. Chambert fails to disclose the lugs are for securing in cage in an annular groove of the inner ring and extends and inclined with respect to each other. Hoffmann et al. et al. discloses a ball bearing cage having lugs (9, 10) that are inclined relative to each other and extend into a annular groove (11) of the inner ring (2/3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bearing of Chambert so that the cage has extending projections that are inclined respective to each other and into an annular groove in the inner ring in view of Hoffmann in order to reduce axial movement of the cage, for keeping the rolling balls in line from moving axially and for prevent dust from settling in the cage.

In claim 2, Chambert discloses the flanks are inclined and faces each other.

In claims 5-6, note the ball pockets are delimited in at least in one axial direction of the gage by side walls (see fig. 2) which are arched from the web and in the axial direction, and a gaps formed between the sidewalls.

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In claims 7-9, Chambert discloses the claimed invention including the groove in each of the retaining lugs (18), wherein each groove is being defined by a radius (see the lugs 18).

In claim 10, Chambert discloses the ribs (see drawing illustration) between two side walls as claimed.

In claim 14, note the side rim as shown in the attached drawing illustration.

In claim 15, it is apparent that due to the due to the tapered angle of bearing cage, the spacing as claimed is inherent (see chambert, fig. 2.).

Regarding claim 3, the combination of Chambert and Hofmann et al. fails to disclose the value of the inclined angle of the flanks with respect to an imaginary plane which emanates from the rotational axis. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the flanks of Chambert in view of Hofmann et al. so that the angle is inclined at 30° as set forth in the claimed invention, since it has been held that discovering an optimum value of a result effect variable involves only routine skill in the art. *In re Boesch*, 617 f.2nd 272, 205.

Allowable Subject Matter

7. Claims 4, 6-7 and 10-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Citation

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the prior art cited in attached PTO Form 892.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marcus Charles
/Marcus Charles/
Primary Examiner, Art Unit 3656

Art Unit: 3656

